

CLAIMS

Claims 1-20 (cancelled).

Claim 21 (new): A method of reinforcing a automotive vehicle structure having a hollow section comprising the steps of:

- a) coating a solid core material with an activatable polymeric material of generally uniform thickness, wherein the sold core material is characterized by a profile that includes a first semielliptical portion and a second adjoining semielliptical portion, each of the first semi-elliptical portion and the second semi-elliptical portion having a smooth and continuous concave first surface and an opposing convex outer surface, the outer convex surface further being characterized by a plurality of projecting peaks and valleys, the peaks and valleys each including parallel side walls and an upper surface that is generally parallel to the concave first surface;
- b) folding the first and second semielliptical portions relative to each other about an axis where the portions adjoin each other, for forming an elliptical inner surface having a major axis, so that the side walls defining the peaks and valleys of the outer convex surface are orthogonally oriented relative to the major axis;
- c) enclosing the solid core material and the activatable polymeric material within the hollow section of the automotive vehicle structure;
- d) passing the assembly to a corrosion treatment bath and subjecting the assembly to a corrosion protection agent; and
- e) subsequently passing the assembly to a drying oven for drying the corrosion protection agent and for initiating foaming of the activatable polymeric material and filling the defined cavity with the activatable polymeric material.